

Date: Monday, 6/19/2006 11:29:17 AM
User: Kim Johnston

HAI

only

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : FWD TUBE ASSEMBLY
Job Number : 27632
Estimate Number : 10467
P.O. Number : *N/A*
This Issue : 6/19/2006 S.O. No. : *N/A*
Prsht Rev. : NC Part Number : D3391021
First Issue : *N/A* Type : MACHINED PARTS Drawing Number : D3391 REV E
Previous Run : 26847 Drawing Revision : E
Material : *N/A*
Due Date : 7/20/2006 Qty: 1 Um: Each
Written By : *[Signature]*
Checked & Approved By : *[Signature]*
Comment : Est. A 05.09.13 New issue KJ/JLM
Est. B 06.02.10 Dwg rev.D ecn 773 EC
Est. C 06.05.02 Added inspections EC

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 D6013047 SKIDTUBE MAT'L



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
SKIDTUBE MAT'L

Pick:

Qty	Part Number	Description	Batch
1	D6013-047	Extrusion	<i>1323935</i>

2.0 LANDING GEAR 1 LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1
Cut extrusion to 46.52 +0.010 -0.020

N/A JLD

3.0 BENDING BENDING MACHINE



Comment: No bender
Bend as per Dwg D3391 Using Bend Prog 3391021

DD06-6-22

4.0 QC5 INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

BE 06-06-22

5.0 HAAS1 HAAS CNC VERTICAL MACHINING #1



Comment: HAAS CNC VERTICAL MACHINING #1
1-Machine as per Folio FA590 Rev. *AA* & Dwg D3391 Rev. *E*
Identify as D3391-1

2-Deburr

Int 06/07/10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries.

QA: N/C Closed: _____ Date: _____

Date: Monday, 6/19/2006 11:29:17 AM
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FWD TUBE ASSEMBLY

Job Number: 27632

Part Number: D3391021

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC2

INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

MB 06/07/10 1

7.0

QC8

SECOND CHECK



Comment: SECOND CHECK

J.G 06/08/03 1

8.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Drill and c'sink float bag holes as per Dwg D3391 using DT8798(Do not open tow cap holes to finish size)
(ONLY DRILL HOLES MARKED "A") *BE 06-08-28*

2-Drill Remaining two holes for tow cap using DT 8819 Locating off of .1875" holes drilled in previous step *BE 06-08-28*

3-Open tow cap holes to .208" as per Dwg D3391 *BE 06-08-28*

4-Open Tow Ring hole to .640" as per Dwg D3391 *BE 06-08-28*

5-Drill wearplate holes as per Dwg D3391 Using Dt8217 & DT8878 *PM 06-08-29*

6--Deburr *PM 06-08-29*

9.0

QC5

INSPECT WORK TO CURRENT STEP



DP 6-8-30



Comment: INSPECT WORK TO CURRENT STEP

10.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Acid etch and Alodine as per QSI 005 4.1 *M.R 06/10/14*

①

11.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

am 03/02/12 ①

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

Date: Monday, 6/19/2006 11:29:18 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FWD TUBE ASSEMBLY

Job Number: 27632

Part Number: D3391021

Job Number:



Seq. #:

Machine Or Operation:

Description :

12.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

FR/YL

07/02/13

①

13.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

a.m

07/02/13

①

14.0

NAS1330C3KB166

INSERT



Comment: Qty.: 14.0000 Each(s)/Unit Total : 14.0000 Each(s)

Rivnut

Pick:

Qty

Part Number

Description

Batch

14

NAS1330C3KB166

Insert

719349

a.m

07/02/13

①

15.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Install Inserts as per Dwg

a.m

07/02/13

①

16.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

71070213

①

17.0

D3401041

Tow Cap Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Tow Cap Assembly

Pick:

Qty

Part Number

Description

Batch

1

D3401-041

Tow Cap

329214

18.0

AN3C4A

BOLT



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Bolt

Pick:

Qty

Part Number

Description

Batch

4

AN3C4A

Bolt

7101390

a.m 07/02/14

①

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

Date: Monday, 6/19/2006 11:29:18 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FWD TUBE ASSEMBLY

Job Number: 27632

Part Number: D3391021

Job Number:



Seq. #: Machine Or Operation: Description :

19.0 NAS1515H3L WASHER



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)
Washer

Pick:

Qty	Part Number	Description	Batch
4	NAS1515H3L	Washer	M103481

20.0 AN960C10L washer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)
washer M103344

21.0 HAND FINISHING1 HAND FINISHING RESOURCE #1



Comment: SMALL & MEDIUM FAB RESOURCE 1
Install tow Cap as per Dwg D3391
Identify as D3391-021

a.m 07/02/14

22.0 QC5 INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP
Inspect thread of each insert using DT8821

07.02.14

23.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1
Identify and Stock
Location: _____

07.02.14

24.0 DC DOCUMENT CONTROL



Comment: DOCUMENT CONTROL
Inspection Level 21

HAZ CHY

Job Completion



U 07.02.14

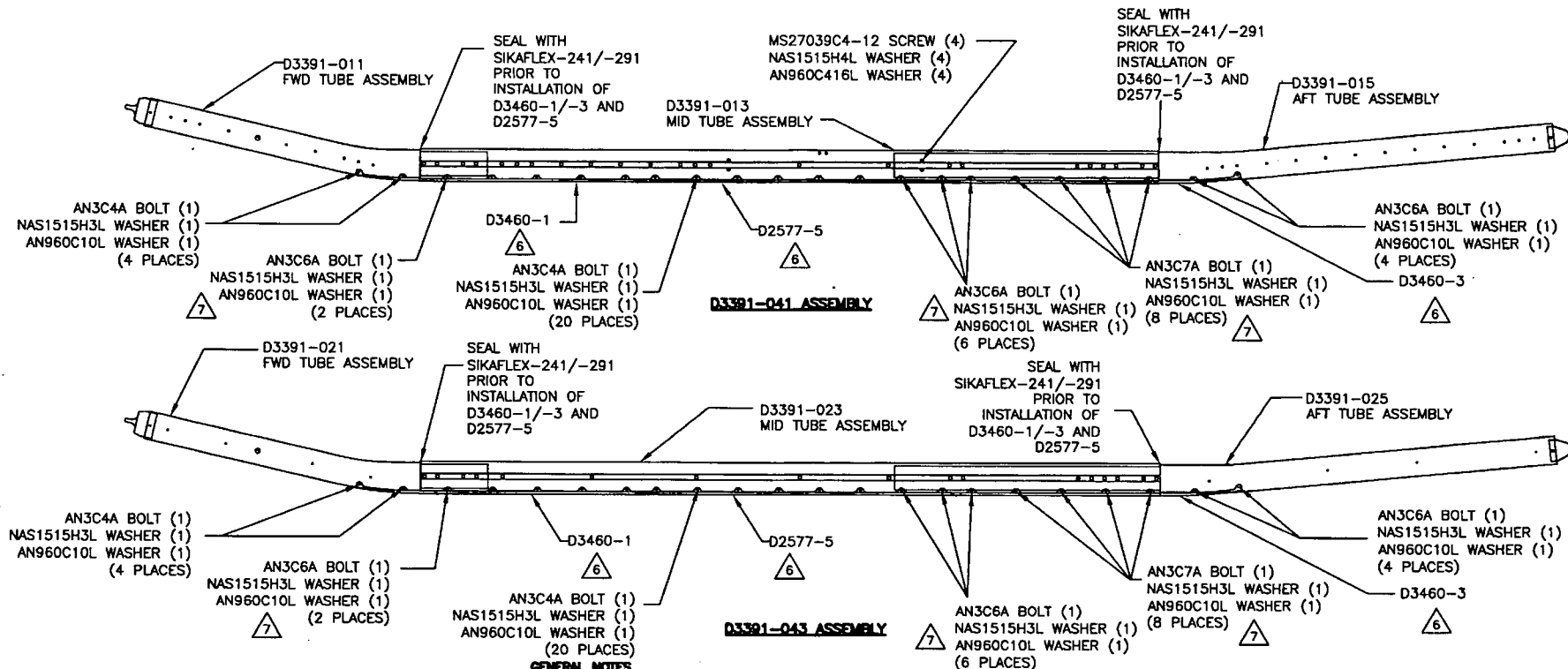
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____



D3391-041/-043 FLOAT SKIDTUBE ASSEMBLY PARTS LIST

QTY - 041	QTY - 043	PART NUMBER	DESCRIPTION
X	X	D3391-041	FLOAT SKIDTUBE ASSEMBLY
		D3391-043	FLOAT SKIDTUBE ASSEMBLY
1		D3391-011	FWD TUBE ASSEMBLY
1		D3391-013	MID TUBE ASSEMBLY
1		D3391-015	AFT TUBE ASSEMBLY
	1	D3391-021	FWD TUBE ASSEMBLY
	1	D3391-023	MID TUBE ASSEMBLY
	1	D3391-025	AFT TUBE ASSEMBLY
24	24	AN3C4A	BOLT
12	12	AN3C6A	BOLT
8	8	AN3C7A	BOLT
44	44	NAS1515H3L	WASHER
44	44	AN960C10L	WASHER
4		MS27039C4-12	SCREW
4		NAS1515H4L	WASHER
4		AN960C416L	WASHER
1	1	D2577-5	WEARSHOE
1	1	D3460-1	WEARSHOE
1	1	D3460-3	WEARSHOE

- ALL DIMENSIONS ARE IN INCHES
- TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- FINISH: ACID ETCH AND ALODINE PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCTON" AFTER FINAL ASSEMBLY. CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL "E" SIZE HOLES (#0.250-#0.257) FOR WEARSHOE INSERTS. C/SINK #0.391/#0.425 x 100" AS APPLICABLE AND INSTALL INSERTS EXCEPT WHERE INDICATED.
- APPLY A LAYER OF SIKAFLEX -241/-291 ADHESIVE BETWEEN THE BOTTOM OF THE SKIDTUBE ASSEMBLY AND THE WEARPLATES
- DO NOT TORQUE, HAND TIGHTEN ONLY

RELEASED

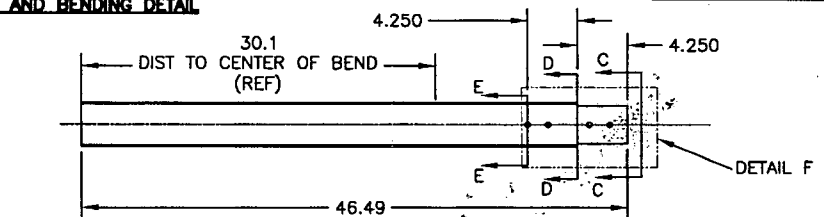
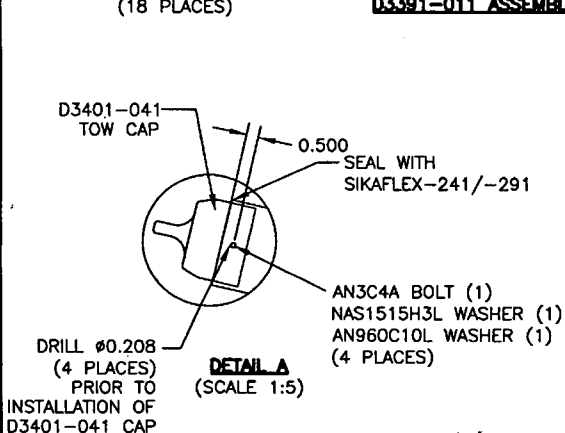
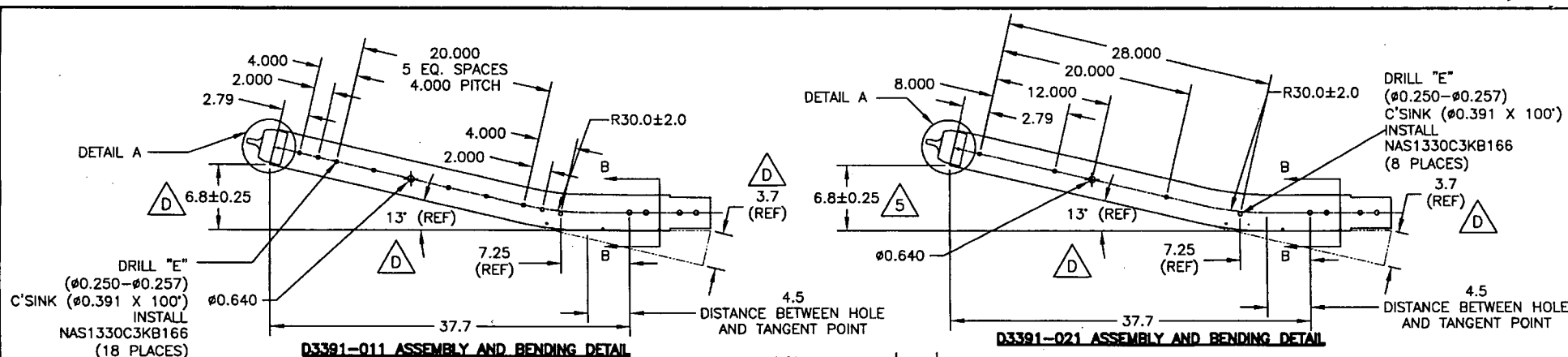
06-05-03

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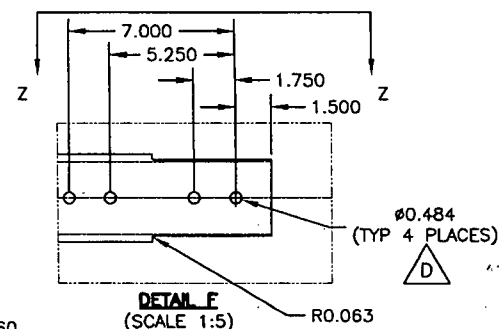
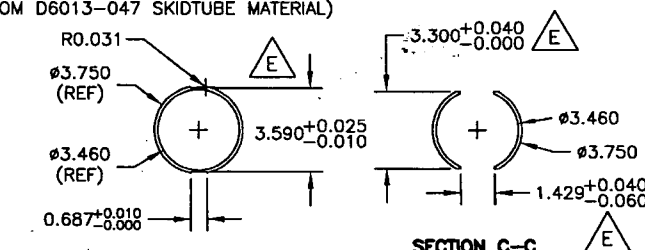
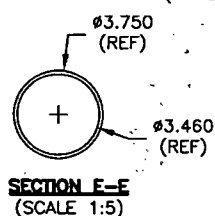
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DATE	06.04.25	TITLE	412 FLOAT SKIDTUBE	REV. E	SHEET 1 OF 3
		SCALE	NTS		

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D3391-1 DRILLING AND CUTTING DETAIL
(MAKE FROM D6013-047 SKIDTUBE MATERIAL)



RELEASED
06-05-03

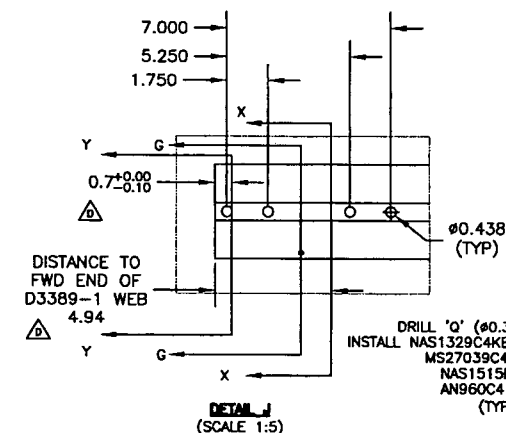
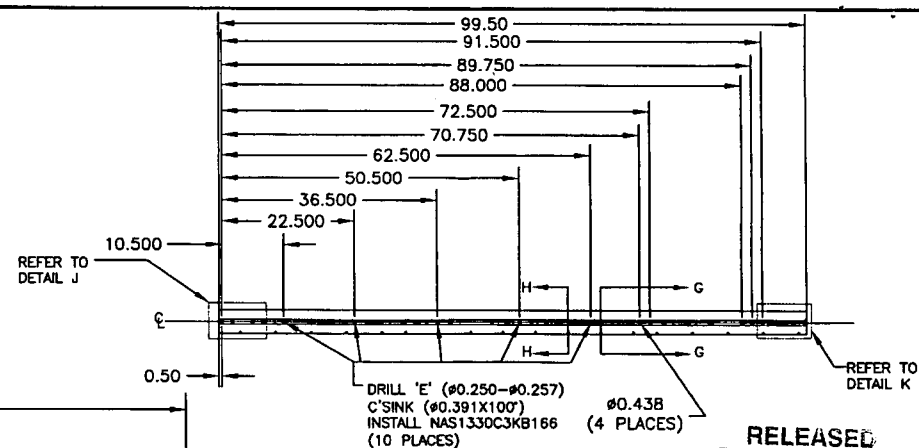
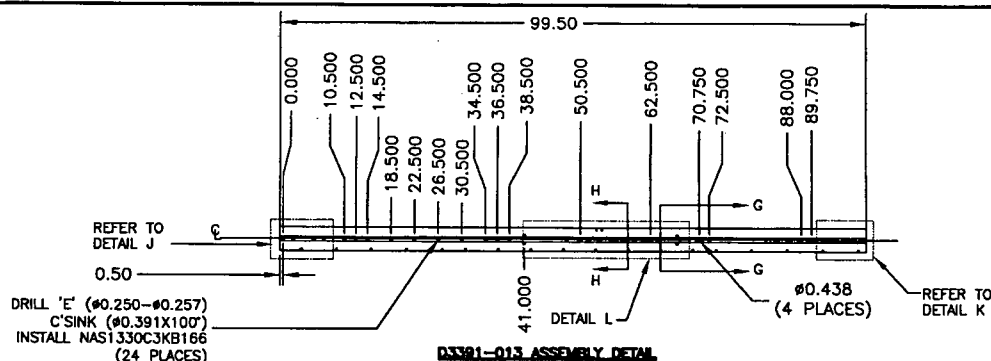
D3391-011/-021 FWD TUBE ASSEMBLY PARTS LIST

QTY - 011	QTY - 021	PART NUMBER	DESCRIPTION
X		D3391-011	FWD TUBE ASSEMBLY
	X	D3391-021	FWD TUBE ASSEMBLY
1	1	D6013-047	FWD TUBE
1	1	D3401-041	TOW CAP
4	4	AN3C4A	BOLT
4	4	NAS1515H3L	WASHER
4	4	AN960C10L	WASHER
24	14	NAS1330C3KB166	INSERT

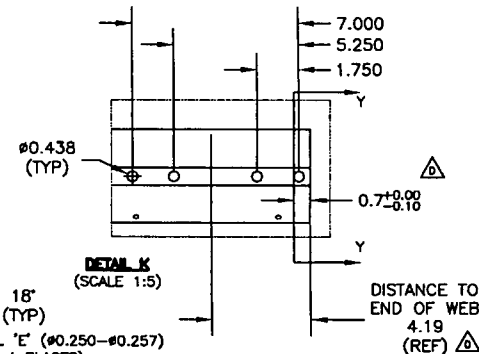
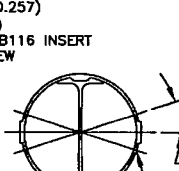
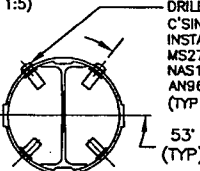
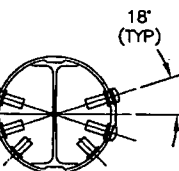
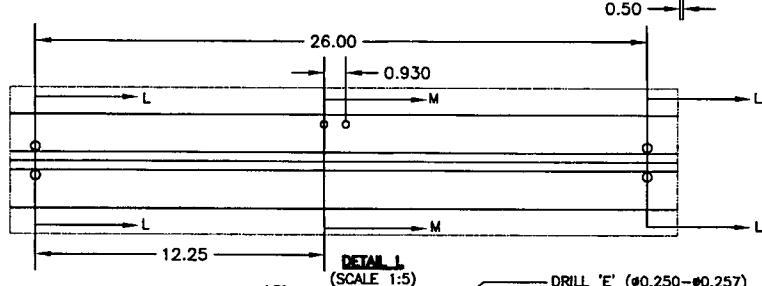
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CHECKED #		APPROVED #		DRAWING NO. D3391	
DATE 06.04.25				TITLE 412 FLOAT SKIDTUBE	
				REV. E SHEET 2 OF 5 SCALE 1:10	

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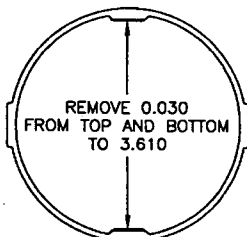
DRILL 'O' (#0.332-#0.338)
INSTALL NAS1329C4KB140 INSERT
MS27039C4-08 SCREW
NAS1515H4L WASHER
AN960C416L WASHER
(TYP 4 PLACES)



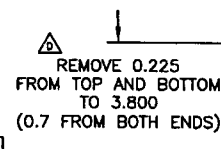
D3391-013/-023 MID TUBE ASSEMBLY PARTS LIST

QTY - 013	QTY - 023	PART NUMBER	DESCRIPTION
X	X	D3391-013	MID TUBE ASSEMBLY
		D3391-023	MID TUBE ASSEMBLY
1	1	D2500-1-100	EXTRUSION
1	1	D3389-1	WEB
24	20	NAS1330C3KB116	INSERT
24	10	NAS1330C3KB166	INSERT
4		NAS1329C4KB140	INSERT
4		NAS1515H3L	WASHER
4		AN960C10L	WASHER
4		NAS1515H4L	WASHER
4		AN960C416L	WASHER
4		MS27039C1-09	SCREW
4		MS27039C4-08	SCREW

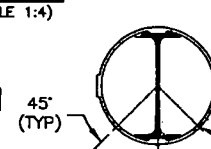
SECTION I-I
(SCALE 1:4)



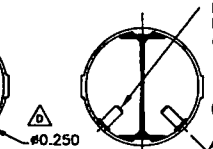
SECTION X-X
(SCALE 1:2)



SECTION Y-Y
(SCALE 1:4)



SECTION Q-Q
(SCALE 1:4)

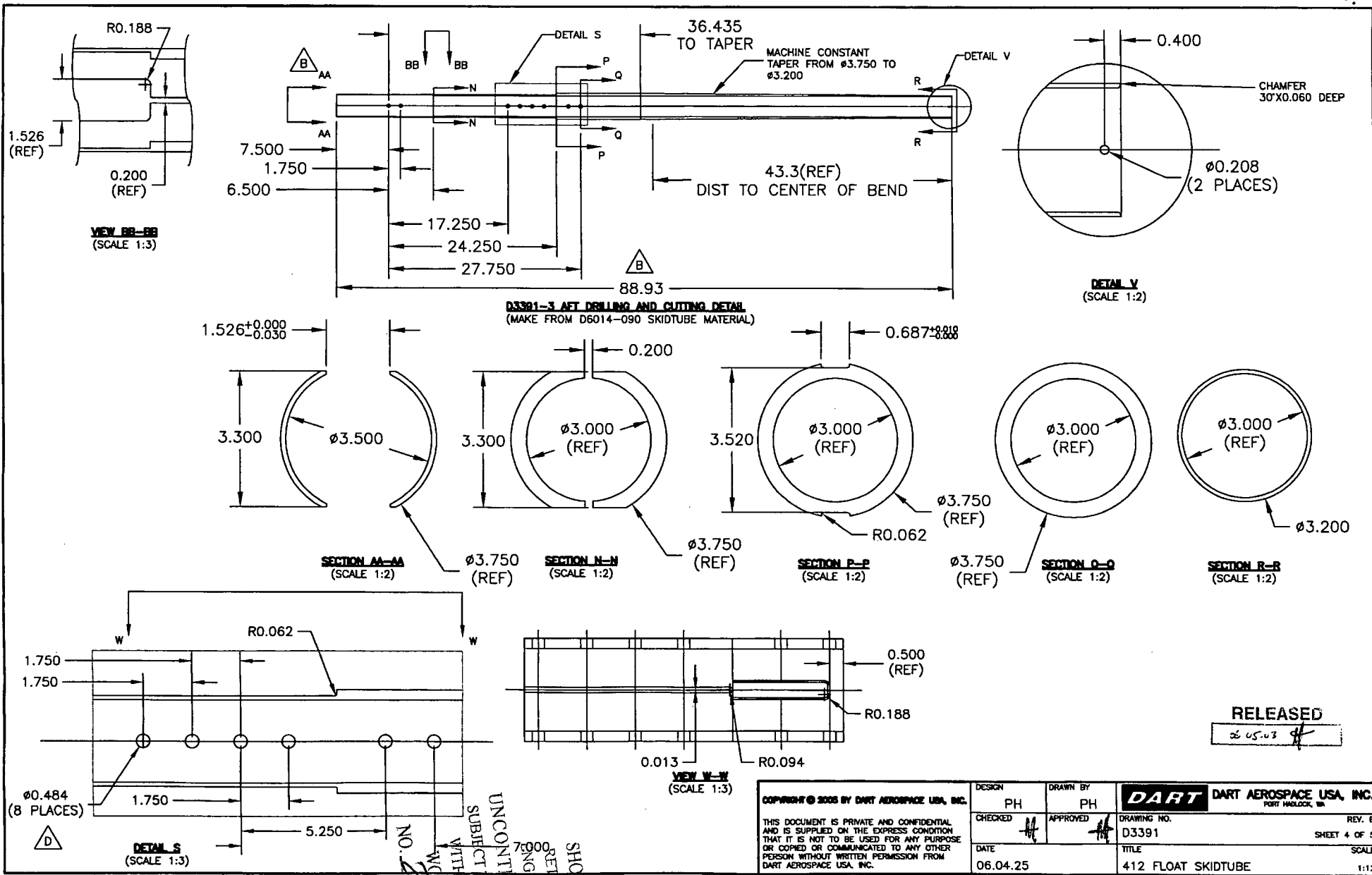


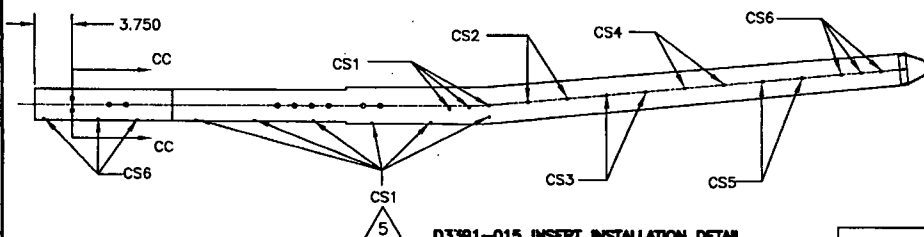
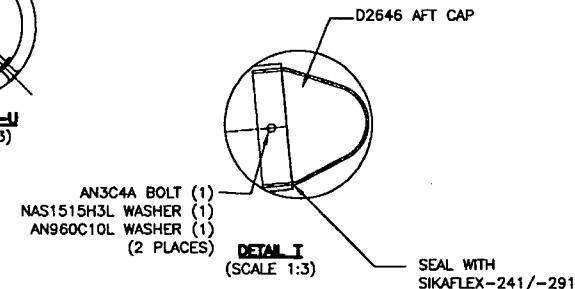
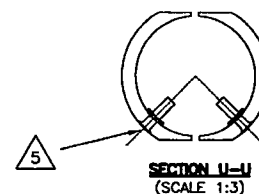
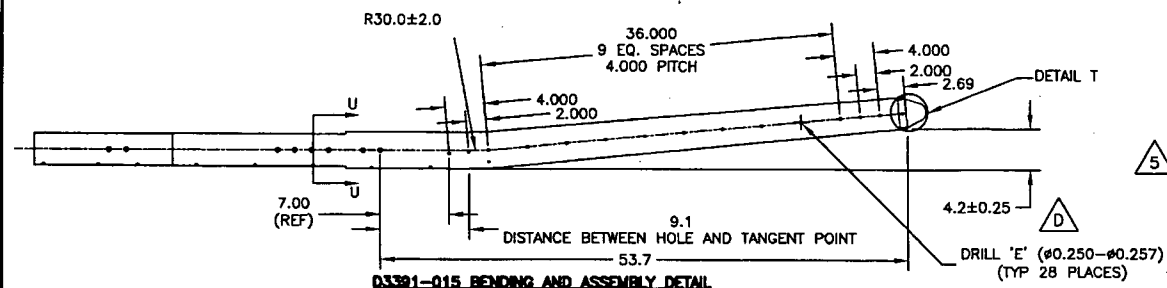
SECTION H-H
(SCALE 1:4)

D3391-013/-023 MID TUBE ASSEMBLY
1) MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
2) INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/-291 PER 015

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DATE 06.04.25		TITLE 412 FLOAT SKIDTUBE		REV. E SHEET 3 OF 5 SCALE 1:20



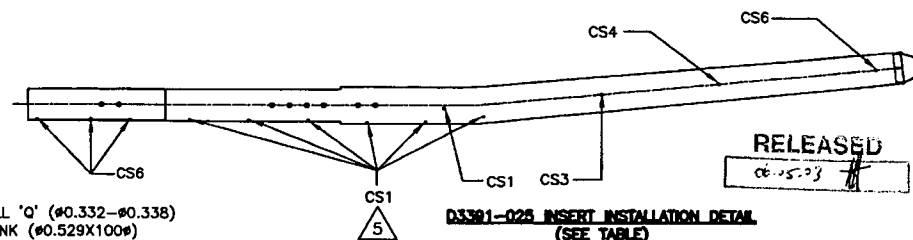
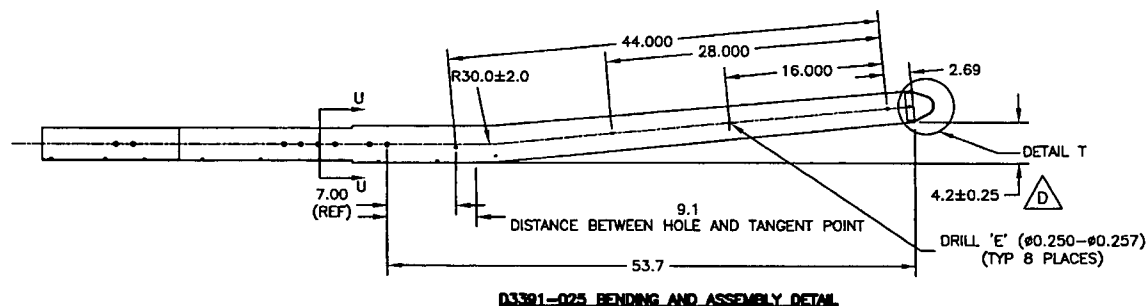


C'SINK AND INSTALL AESS10KBXXX AND/OR NAS1330C3KBXXX IN HOLES MARKED CS1-CS6 AS FOLLOWS

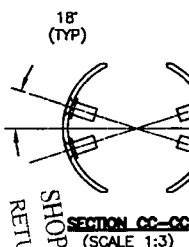
HOLE MARKED	QTY D3391-015	QTY D3391-025	C'SINK	P/N
CS1	18	14	Ø0.425	AESS10KB386
CS2	4	2	Ø0.391	AESS10KB398
CS3	4	2	Ø0.391	NAS1330C3KE316
CS4	4	2	Ø0.391	NAS1330C3KE266
CS5	4	2	Ø0.391	NAS1330C3KE216
CS6	12	8	Ø0.391	NAS1330C3KE166

D3391-015/-025 AFT TUBE ASSEMBLY PARTS LIST

QTY - 015	QTY - 025	PART NUMBER	DESCRIPTION
X		D3391-015	AFT TUBE ASSEMBLY
	X	D3391-025	AFT TUBE ASSEMBLY
1	1	D6014-090	AFT TUBE
1	1	D2646	AFT CAP
18	14	AESS10KB386	INSERT
4	2	NAS1330C3KE316	INSERT
4	2	NAS1330C3KE266	INSERT
4	2	NAS1330C3KE216	INSERT
12	8	NAS1330C3KE166	INSERT
4	2	NAS1330C4KB151	INSERT
2	2	AN3C4A	BOLT
2	2	NAS1515H3L	WASHER
2	2	AN960C10L	WASHER



DRILL 'O' (#0.332-#0.338)
C'SINK (#0.529X100#)
NAS1330C4KB151 INSERT (1)
(4 PLACES)



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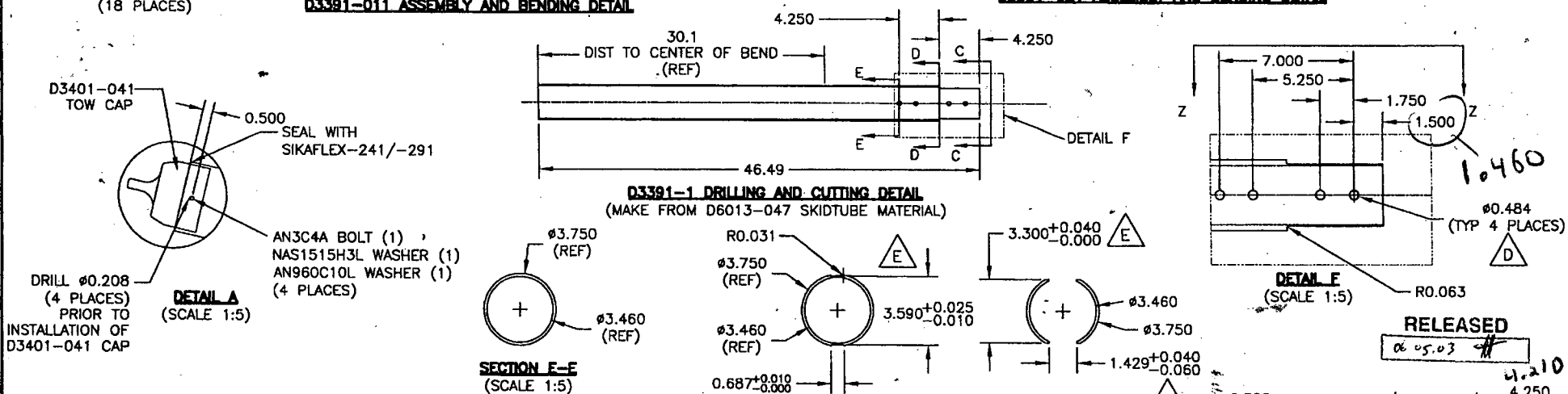
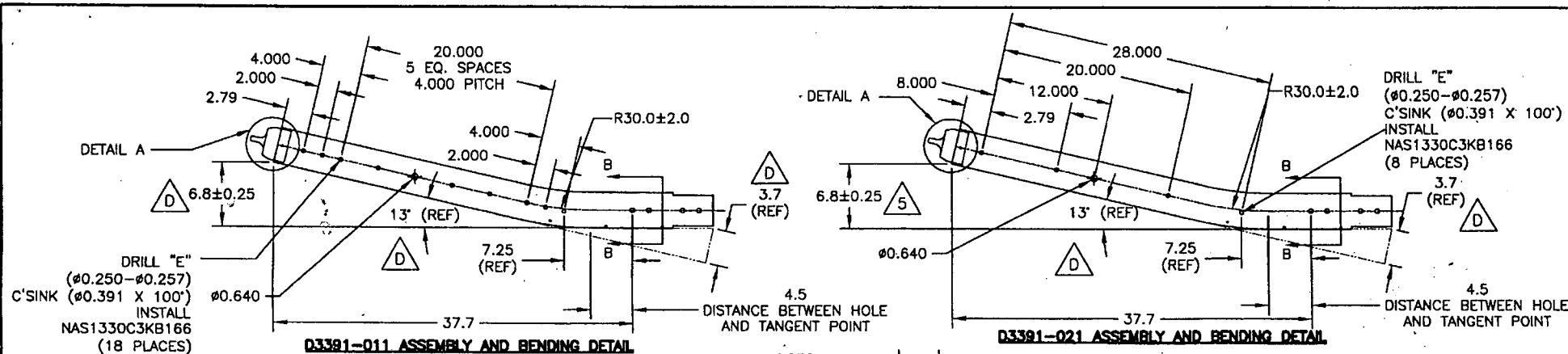
DESIGN PH
CHECKED PH
DATE 06.04.25

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D3391-011/-021 FWD TUBE ASSEMBLY PARTS LIST

QTY - 011	QTY - 021	PART NUMBER	DESCRIPTION
X		D3391-011	FWD TUBE ASSEMBLY
	X	D3391-021	FWD TUBE ASSEMBLY
1	1	D6013-047	FWD TUBE
1	1	D3401-041	TOW CAP
4	4	AN3C4A	BOLT
4	4	NAS1515H3L	WASHER
4	4	AN960C10L	WASHER
24	14	NAS1330C3KB166	INSERT

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DESIGN PH PH DART DART AEROSPACE USA, INC.
CHECKED PH APPROVED PH
DATE 06.04.25 DRAWING NO. D3391
TITLE 412 FLOAT SKIDTUBE
REV. E SHEET 2 OF 5
SCALE 1:10

47.075" avant.

Date: 6/23/2006 8:53AM
User: Linda Lacelle

PROCESS SHEET

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: FWD TUBE ASSEMBLY
Job No.	: 27675	Part No.	: D3391021
Estimate No.	: 10467	Drawing No.	: D3391 REV E
P.O. No.	: N/A	Drawing Rev.	: E
First Issue	: 11	Project No.	: N/A
Prsht Rev.	: NC	Material	: N/A
This Issue	: 6/23/2006	Due Date	: 7/15/2006
Prev. Run	: 27674	QTY:	: 1
Type	: MACHINED PARTS		

Written by:

Checked & Approved by:

Comment :

Est. A 05.09.13 New issue KJ/JLM
Est. B 06.02.10 Dwg rev.D ecn 773 EC --
Est. C 06.05.02 Added inspections EC

Job Number:



Seq. No.	Machine or Operation	Description
1.0	D6013047	SKIDTUBE MAT'L
	Comment:	Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s) SKIDTUBE MAT'L Pick: Qty Part Number Description Batch 1 D6013-047 Extrusion
2.0	LANDING GEAR 1	LANDING GEAR RESOURCE 1
	Comment:	LANDING GEAR RESOURCE 1 Cut extrusion to 46.52 +0.010 -0.020
3.0	BENDING	BENDING MACHINE
	Comment:	Nc bender Bend as per Dwg D3391 Using Bend Prog 3391021
4.0	QC5	INSPECT WORK TO CURRENT STEP
	Comment:	INSPECT WORK TO CURRENT STEP
5.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
	Comment:	HAAS CNC VERTICAL MACHINING #1 1-Machine as per Folio FA590 Rev. <u>EA</u> & Dwg D3391 Rev. <u>E</u> Identify as D3391-1 2-Deburr

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Number:



Seq. No.	Machine or Operation	Description
6.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
	Comment: INSPECT PARTS AS THEY COME OFF MACHINE	<i>9-2 06/02/10</i>
7.0	QC8	SECOND CHECK
	Comment: SECOND CHECK	<i>3.6 06/08/03</i>
8.0	LANDING GEAR 1	LANDING GEAR RESOURCE 1
	Comment: LANDING GEAR RESOURCE 1	
	1-Drill and c/sink float bag holes as per Dwg. D3391 using DT8798(Do not open tow cap holes to finish size) (ONLY DRILL HOLES MARKED "A")	<i>Pmc</i> <i>06-08-30</i> <i>Pm '06-08-30</i> <i>Pm '06-08-30</i>
	2-Drill Remaining two holes for tow cap using DT 8819 Locating off of .1875" holes drilled in previous step	
	3-Open tow cap holes to .208" as per Dwg D3391	
	4-Open Tow Ring hole to .640" as per Dwg D3391	
	5-Drill wearplate holes as per Dwg D3391 Using Dt8217 & DT8878	
	6-Deburr	
9.0	QC5	INSPECT WORK TO CURRENT STEP
	Comment: INSPECT WORK TO CURRENT STEP	<i>DP 06-8-30</i>
10.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
	Comment: HAND FINISHING RESOURCE #1 Acid etch and Alodine as per QSI 005 4.1	<i>a.m 06-08-30</i>
11.0	QC3	INSPECT POWDER COAT/CHEMICAL CONVERSION
	Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION	<i>DL 06/08/31</i>
12.0	POWDER COATING	POWDER COATING
	Comment: POWDER COATING Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3	<i>DL 06/08/31</i>
13.0	QC3	INSPECT POWDER COAT/CHEMICAL CONVERSION
	Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION	<i>a.m 06-08-31</i>
14.0	NAS1330C3KB166	INSERT

WORK ORDER CHANGES

DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Job Number:



Seq. No.	Machine or Operation	Description
	Comment: Qty.: 14.0000 Each(s)/Unit Total: 14.0000 Each(s) Rivnut Pick: Qty Part Number Description Batch 14 NAS1330C3KB166 Insert	<i>checks Inv, DL 06/08/31</i> M100732
15.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
	Comment: HAND FINISHING RESOURCE #1 Install Inserts as per Dwg	<i>DL 06/09/01</i> (1)
16.0	QC5	INSPECT WORK TO CURRENT STEP
	Comment: INSPECT WORK TO CURRENT STEP	<i>06/08/31</i> (1)
17.0	D3401041	Tow Cap Assembly
	Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s) Tow Cap Assembly Pick: Qty Part Number Description Batch 1 D3401-041 Tow Cap	<i>FC</i> 26881
18.0	AN3C4A	BOLT
	Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s) Bolt Pick: Qty Part Number Description Batch 4 AN3C4A Bolt	<i>FC</i> 101390
19.0	NAS1515H3L	WASHER
	Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s) Washer Pick: Qty Part Number Description Batch 4 NAS1515H3L Washer	<i>FC</i> 101340
20.0	AN960C10L	washer
	Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s) washer	<i>FC</i> 101340
21.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
	Comment: SMALL & MEDIUM FAB RESOURCE 1 Install tow Cap as per Dwg D3391 Identify as D3391-021	<i>FC</i> 06/10/10
22.0	QC5	INSPECT WORK TO CURRENT STEP
	Comment: INSPECT WORK TO CURRENT STEP Inspect thread of each insert using DT8821	<i>06/10/11</i>

Job Number:



Seq. No.	Machine or Operation	Description
23.0	PACKAGING 1	PACKAGING RESOURCE #1
Comment: PACKAGING RESOURCE #1 Identify and Stock Location: <i>N/A</i> <i>FE 06-10-11</i> <i>(1)</i>		
24.0	DC	DOCUMENT CONTROL
Comment: DOCUMENT CONTROL Inspection Level 21 <i>S 06/18/11</i> <i>(1)</i>		

Job Completion



U 26.10.11

Date: 6/23/2006 8:57AM
User: Linda Lacelle

PROCESS SHEET

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: FWD TUBE ASSEMBLY
Job No.	: 27673	Part No.	: D3391021
Estimate No.	: 10467	Drawing No.	: D3391 REV E
P.O. No.	: <i>N/A</i> SO No. <i>N/A</i>	Drawing Rev.	: E
First Issue	: <i>1/1</i>	Project No.	: <i>N/A</i>
Prsht Rev.	: NC Type : MACHINED PARTS	Material	: <i>N/A</i>
This Issue	: 6/23/2006	Due Date	: 7/15/2006 QTY: 1
Prev. Run	: 27635		

Written by:

Checked & Approved by:

Comment :

Est. A 05.09.13 New issue KJ/JLM
Est. B 06.02.10 Dwg rev.D ecn 773 EC
Est. C 06.05.02 Added inspections EC

Job Number:



Seq. No.	Machine or Operation	Description
1.0	D6013047	SKIDTUBE MAT'L
	Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s) SKIDTUBE MAT'L Pick: Qty Part Number Description Batch 1 D6013-047 Extrusion <i>B23935 DP06-6-23</i>	
2.0	LANDING GEAR 1	LANDING GEAR RESOURCE 1
	Comment: LANDING GEAR RESOURCE 1 Cut extrusion to 46.52 +0.010 -0.020 <i>ml 06/06/23</i>	
3.0	BENDING	BENDING MACHINE
	Comment: Nc bender Bend as per Dwg D3391 Using Bend Prog 3391021 <i>DP06-6-23</i>	
4.0	QC5	INSPECT WORK TO CURRENT STEP
	Comment: INSPECT WORK TO CURRENT STEP <i>Pm 06-06-23</i>	
5.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
	Comment: HAAS CNC VERTICAL MACHINING #1 1-Machine as per Folio FA590 Rev. <i>AA</i> & Dwg D3391 Rev. <i>E</i> Identify as D3391-1 2-Deburr	

ml 06/07/10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

Job Number:



Seq. No.	Machine or Operation	Description
6.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
	Comment: INSPECT PARTS AS THEY COME OFF MACHINE	7ml 06/07/10 1
7.0	QC8	SECOND CHECK
	Comment: SECOND CHECK	5.6 06/08/03 1
8.0	LANDING GEAR 1	LANDING GEAR RESOURCE 1
	Comment: LANDING GEAR RESOURCE 1	
	1-Drill and c'sink float bag holes as per Dwg D3391 using DT8798(Do not open tow cap holes to finish size) (ONLY DRILL HOLES MARKED "A")	pm 06-08-280
	2-Drill Remaining two holes for tow cap using DT 8819 Locating off of .1875" holes drilled in previous step	pm 06-08-280
	3-Open tow cap holes to .208" as per Dwg D3391	pm 06-08-280
	4-Open Tow Ring hole to .640" as per Dwg D3391	pm 06-08-280
	5-Drill wearplate holes as per Dwg D3391 Using D8217 & DT8878	pm 06-08-280
	6--Deburr	pm 06-08-290
9.0	QC5	INSPECT WORK TO CURRENT STEP
	Comment: INSPECT WORK TO CURRENT STEP	DP 6-8-30
10.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
	Comment: HAND FINISHING RESOURCE #1 Acid etch and Alodine as per QSI 005 4.1	a.m. 06-08-30 ①
11.0	QC3	INSPECT POWDER COAT/CHEMICAL CONVERSION
	Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION	06-08-31 DL 06/09/10 ①
12.0	POWDER COATING	POWDER COATING
	Comment: POWDER COATING Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3	06-08-31 DL 06/09/10 ①
13.0	QC3	INSPECT POWDER COAT/CHEMICAL CONVERSION
	Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION	a.m. 06-08-31 ①
14.0	NAS1330C3KB166	INSERT

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

Job Number:



Seq. No.	Machine or Operation	Description
	Comment: Qty.: 14.0000 Each(s)/Unit Total: 14.0000 Each(s) Rivnut Pick: Qty Part Number Description Batch 14 NAS1330C3KB166 Insert M100732 DL 06/08/31 (1)	check Inv.
15.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
	Comment: HAND FINISHING RESOURCE #1 Install Inserts as per Dwg DL 06/08/31 (1)	
16.0	QC5	INSPECT WORK TO CURRENT STEP
	Comment: INSPECT WORK TO CURRENT STEP MM 06/08/31 (1)	
17.0	D3401041	Tow Cap Assembly
	Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s) Tow Cap Assembly Pick: Qty Part Number Description Batch 1 D3401-041 Tow Cap B-26 881	
18.0	AN3C4A	BOLT
	Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s) Bolt Pick: Qty Part Number Description Batch 4 AN3C4A Bolt M101390	
19.0	NAS1515H3L	WASHER
	Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s) Washer Pick: Qty Part Number Description Batch 4 NAS1515H3L Washer M101340	
20.0	AN960C10L	washer
	Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s) washer M 100786	Q.M 06-08-31 (1)
21.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
	Comment: SMALL & MEDIUM FAB RESOURCE 1 Install tow Cap as per Dwg D3391 Identify as D3391-021 Q.M 06-09-31 (1)	
22.0	QC5	INSPECT WORK TO CURRENT STEP
	Comment: INSPECT WORK TO CURRENT STEP Inspect thread of each insert using DT8821 L 06-10-03 (1)	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ Date: 06/10/06

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

Job Number:



Seq. No.	Machine or Operation	Description
23.0	PACKAGING 1	PACKAGING RESOURCE #1
	Comment: PACKAGING RESOURCE #1 Identify and Stock Location: <i>N/A</i> <i>04/04/05</i>	
24.0	DC	DOCUMENT CONTROL
	Comment: DOCUMENT CONTROL Inspection Level 21 <i>DP 06/10/06</i> <i>0</i>	

Job Completion



U 06/10/05

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

